Pending Order Status
This inquiry provides access to a list of pending service orders, and their status and content. This information is provided prior to the conversion of an end-user account for pre-ordering purposes, and prior to the service order posting in the billing system for monitoring order progress.

Utilizing the DataGate interface in the SWBT service area, access to a list of pending service orders is provided by working telephone number. Detailed service order information is provided when an inquiry containing working telephone number and service order number is processed. This function is also available in a GUI named Order Status in both the SWBT and PB/NB service areas. CLECs in Ameritech region use an EDI-X12 interface in the form of an 869 transaction to query pending order status with the response coming back to CLEC as an 870 status report.[57] CLECs may monitor the progress of their orders using an Interactive Voice Response (IVR) system made available by Ameritech. SNET does not presently support this function.

Posted Order Status
This inquiry provides access to posted service order status and content. The information provided represents completed service order status as posted to the billing system.

Access to this information is available in the Order Status GUI for the SWBT service area. A list of posted service orders or detailed service order information is provided when an inquiry containing customer number is processed. Detailed service order information is provided when an inquiry containing working telephone number, service order number or purchase order number is processed. PB/NB, Ameritech and SNET do not currently support this function.

Provisioning Order Status
This inquiry provides access to the service order provisioning information to determine the pending or dispatched status of a service order. The information provided presents the status of the order, such as whether it has been dispatched or notes regarding the order.

Access to this information is provided via the DataGate interface in the PB/NB service area by customer number, service order number or telephone number. Access to this information is also available via the GUI named Provisioning Order Status for both the SWBT and PB/NB service areas. Ameritech and SNET do not currently support this function.

The following table summarizes the provisioning functions currently available in the SBC/Ameritech service areas.

Table 7:

RECORD TYPE	SWBT	PB/NB	SNET	Ameritech
865	• SOC • Jeopardy Notice	• SOC • Jeopardy Notice	• SOC	• SOC
869	NA	NA	NA	• Pending Order Status

[57] Corecomm Language (AGREED)

RECORD TYPE	SWBT	PB/NB	SNET	Ameritech
				Inquiry
870	NA	NA	NA	• Jeopardy Notice • Pending Order Status [58] Response
836	• N/A – Handled via CARE process	• N/A – Handled via CARE process	• N/A – Handled via CARE process	• Loss Notification
Proprietary Message Event via DataGate	• Pending Order Status	• Provisioning Order Status	NA	NA
Graphical Data Provided via the Order Status and Provisioning Order Status GUIs	• Pending Order Status • Provisioning Order Status • Posted Order Status	• Pending Order Status • Provisioning Order Status	NA	NA
Alternative Methods[59]			• Jeopardy Notice (provided manually)	• Pending Order Status (via IVR)

The following lists current preorder, order, and provisioning interfaces available by region. This also includes the backend systems to which CLECs have direct access.[60]

Table 8:

SYSTEM	SWBT	PB/NB	SNET	Ameritech	Proprietary /Retail	Interface Function
GUI INTERFACE						
Order Status	X	X		X		Provisioning
Provisioning Order Status (POS)	X	X				Provisioning
EASE/BEASE	X				X	Preorder/Order
Starwriter		X (PB only)			X	Preorder/Order
CCTools / W-CIWin			X		X	Preorder/Order
CESAR On-line		X				Preorder/Order
CPSOS-Prequal (SWB)	X				X	Preorder
TCNet Preorder				X		Preorder
Verigate	X	X				Preorder
3B			X		X	Order
LEX	X	X				Order
PBSM		X			X	Order
W-SNAP			X		X	Order
GATEWAY INTERFACE						

[58] Issue 31 (CLOSED)

[59] Issue 32 (CLOSED)

[60] Issue 26, 27, 30, and 33. (CLOSED)

MSAP			X			Preorder/Order/ Maint& Repair
EDI Preordering	X	X		X		Preorder
CORBA	X	X				Preorder
DataGate	X	X				Preorder
CESAR		X				Order
EXACT	X		X	X		Order
EDI Ordering	X	X		X		Order
E911 Gateway		X				Order
LIDB	X	X	X	X		Order
Listings Gateway		X				Order
RMI (Resale Mechanized Interface)		X				Order
DIRECT ACCESS						
PREMIS (PACBELL)		X			X	Preorder
SORD	X	X			X	Preorder/Order/ Provisioning
OTHER						
Telis	X	X	X	X		Order

D. Maintenance and Repair

Available Interfaces

All SBC/Ameritech service areas offer application to application and GUI maintenance and repair interfaces. Ameritech, PB/NB, and SWBT all support application to application interfaces for Electronic Bonding Trouble Administration (EBTA) based on the American National Standards Institute (ANSI) Standards. SNET offers a non-standard application to application interface, MSAP, to support maintenance and repair functions. All service areas in SBC/Ameritech have developed their own GUI interface. Each GUI interface supports various functions with different presentations to the end user.

PB/NB offers Pacific Bell Service Manager (PBSM). It allows a customer to: Create a trouble report, view trouble history, retrieve trouble status and perform MLT tests on Resale POTS and loop with port.

SWBT offers Toolbar/Trouble Administration. It allows a customer to: Create a trouble report, view trouble history, retrieve trouble status and perform MLT tests on Resale POTS and loop with port.

SNET offers CCTools, which allows a customer to view trouble history and retrieve trouble status for resale POTS products.

Ameritech offers EBTA GUI. It allows a customer to: Create a trouble report, view status history, receive proactive status, clear and close trouble reports. It provides similar functionality to the application to application interface.

The following table is a summary of the maintenance and repair application to application and GUI interfaces in the various SBC/Ameritech service areas.

Table 9:

SYSTEM	SWBT	PB/NB	SNET	Ameritech
APP-TO-APP	System: Electronic Bonding – TA T1.262:1998 (Release 4.5 8/99) T1.227:1995 T1.227A (Release 5.1 10/99) T1.228:1995 Release 4.1.0	System: Electronic Bonding – TA T1.262:1998 (Release 4.5 8/99) T1.227:1995 T1.227A (Release 5.1 10/99) T1.228:1995 Release 4.1.0	System : MSAP EDI format Release: N/A	System: Electronic Bonding – TA T1.227:1995 T1.227A (Release 5.1 10/99) T1.228:1995 Release: 5.0
GUI	System: Toolbar / TA Create Trouble Reports MLT Test POTS / loop with port View trouble history View status View trouble report list. Clear and Close GUI-Windows Based Release 5.1.0	System: PBSM Create Trouble Reports MLT Test POTS / loop with port View trouble history View status View trouble report list. Telnet –VT100 Terminal Emulation Release: 8.3	System: CCTools View trouble history View status GUI-Windows based Release: NA	System: EBTA GUI Create Trouble Reports View status history Receive status View status View trouble report list. Clear and Close GUI-Windows Based Release: 1.0

The following table shows the business functions that can be performed by the various service area-specific GUIs. The business functionality and the screen designs are different for each service area. In most cases the information entered into the fields on the GUI is mapped to data fields in the back end Operating Support Systems (OSS).

Table 10:

FUNCTION	SWBT (TOOLBAR – TA)	PB/NB (PBSM)	SNET (CCTOOLS)	Ameritech (EBTA GUI)
Create				
Circuit Types (Telcordia valid circuit ids)	Yes	Yes	No	Yes
Access Hours (test and premise access hrs)	Yes	Yes	No	Yes
Narrative	Yes	Yes	No	Yes
Trouble Type	Yes	Yes	No	Yes
Dispatch Authorization	Yes	Yes	No	Yes
Contact information	Yes	Yes	No	Yes
TSP Priority	No	No	No	Yes
Status Interval	No	No	No	Yes
Comments /Notes	No	No	No	Yes
Cancel	No	No	No	Yes
Modify info after create	No	No	No	Yes
Messaging	Yes	Yes	No	Yes
Get Status (refresh)	Yes	Yes	Yes	Yes
Modify	No	No	No	Yes
Proactive Statusing	No	No	No	Yes
Escalations	No	No	No	Yes

Clear / Close	No	No	No	Yes
History	Trouble	Trouble	Trouble	Ticket Status
MLT Test	Yes	Yes	No	No
Status notification	No	No	No	Yes
Estimated Repair Time	No	No	No	Yes
WEB Version	No	No	No	Yes
Circuit Security Supports MCN, ACNA, or CCNA	Yes	Yes	No	Yes (except MCN)
Close out Narrative	Yes	Yes	No	Yes
Circuit Inventory*	Yes	No	No	No
Binding Post**	No	Yes	No	No

*Circuit Inventory is a GUI service provided in the SWBT service area which allows a user to enter a partial designed circuit ID and receive a list of up to 125 matches.

**Binding Post is a GUI service available in PB to provide PB terminal binding post information. PB provides terminal access to CLECs instead of NIDs.[61]

[61] Issue 156 (CLOSED)

E. Billing

CLEC billing has been organized into five categories:

- Billing Data Tape (BDT)
- Exchange Message Interface (EMI) Daily Usage
- Electronic Data Interchange (EDI)
- Online Viewing/GUI
- Product Billing System Alignment

Billing Data Tape (BDT)

All SBC/Ameritech service areas provide CLECs with billing data related to their purchase of unbundled network elements (UNEs). The primary billing vehicle for billing UNEs is Carrier Access Billing System (CABS), which produces the BDT file format. All service areas adhere to the same CABS Billing Output Specifications (BOS) national guidelines for bill media, software version control, user documentation, and user notification. Additionally, all SBC/Ameritech service areas provide BDT data on comparable output media that include electronic transmission and tape.

All the SBC/Ameritech service areas use Billing Output Specifications (BOS) developed guidelines. A 'differences list' is produced with each BDT change outlining where and why a service area may deviate from standards. Only those BDT records that are applicable to a given service area are produced by that service area. Additionally, any fields on a record that do not apply to a service area are populated with a default value.

Three months prior to the first possible implementation of a change to the Billing Data Tape, a letter is sent to the customers identifying the changes and any deviations from standards. This is standard across all service areas.

There are differences in the BDT records produced for CLECs across the SBC/Ameritech service areas, but these are due largely to service area-specific tariff and contracts and will continue to exist.

Exchange Message Interface (EMI)

SBC/Ameritech has a responsibility to provide CLECs with usage messages that may be used in the billing of their end-customers. The CLECs receive usage files containing EMI records that provide the billing details for individual messages. All SBC/Ameritech service areas follow industry-accepted Ordering and Billing Forum (OBF) EMI format for message exchange.

At the inception of local exchange competition, Incumbent Local Exchange Carriers (ILEC) independently worked with CLECs to interpret the application of the OBF EMI guidelines, due to lack of complete and definitive industry guidelines. These service area-specific interpretations resulted in the population of EMI records that currently differ somewhat amongst the SBC/Ameritech service areas.

Some service area-specific products have caused a need for locally negotiated records. There has been no need for industry standard records for these local products. The records will continue to be provided in the daily usage file.

The following table summarizes the existing functionality by service area. Where (n/a) is noted, products have not been developed in that service area.

Table 11:

Existing Functionality by Service Area				
Function	**SWBT**	**PB/NB**	**SNET**	**Ameritech**
Bill Media & Version *EMI records sent to CLECs in Daily Usage Extract:*				
Header/Trailer	20-20-01/02 20-21-01/02 20-24-01/02	20-21-01/02 20-21-09/10	20-21-01/02	20-24-01/02
Toll	10-01-01	10-01-01	10-01-01 *Operator handled only	10-01-01
Specialized Services - Custom calling features	10-01-18	10-01-18	10-01-18	10-01-18
New Class feature record	n/a	10-01-19	n/a	n/a
Local	10-01-31	10-01-31	10-01-31	10-01-31
D/A	10-01-32	10-01-32	10-01-32	10-01-32
Operator Verification	10-01-35	10-01-35	10-01-35	10-01-35
Operator Interrupt	10-01-37	10-01-37	10-01-37	10-01-37
Credits	03-01-01	41-xx-xx 03-01-01	03-01-01	41-xx-xx
Switched Data services	01-01-62	n/a	01-01-62	n/a
UNE Specific Records: CABS MTS, Terminating IntraLATA UNE	11-01-01	11-01-01	n/a	n/a
UNE Originated, International Terminated	11-02-01	n/a	n/a	n/a
Terminating Local UNE	11-01-31	n/a	n/a	n/a
D/A (carrier involved)	11-01-32	n/a	n/a	n/a
Terminating Access	11-01-20	n/a	n/a	n/a
Originating 800	11-01-25	11-01-25	n/a	n/a
Originating 500	11-01-26	n/a	n/a	n/a
Guidelines	• Follows the industry accepted OBF EMI format for message exchange.	• Follows the industry accepted OBF EMI format for message exchange.	• Follows the industry accepted OBF EMI format for message exchange.	• Follows the industry accepted OBF EMI format for message exchange.

Existing Functionality by Service Area				
Function	**SWBT**	**PB/NB**	**SNET**	**Ameritech**
Delivery Media	• Tape • Connect: Direct • Dial Up	• Tape • Connect: Direct	• Connect: Direct	• Tape • Connect: Direct • Dial Up
User Guide – media offer on	SWBT/Inter-industry web site or Email from Account Manager	PB/NB has a CLEC handbook that is available on-line to the CLECs on the internet.	CLEC Guide published via internet. It is routinely maintained	The Ameritech user guide is offered on the internet.
User Guide – Publication notification process	CLECs are notified through an accessible letter 60 days in advance of any changes to EMI records that could impact them	CLECs are notified through an accessible letter 120 days in advance of any changes to EMI records that could impact them	CLECs are notified through an accessible letter 60 days in advance of any changes to EMI records that could impact them	CLECs are notified by letter at least 45 days prior to any change in the EMI records that could impact them. Changes are posted to the TCNet web site.

There are within SWBT non standard record exchanges sent as category 92 records used for various purposes outlined in "Data Exchange" or "CLEC Interconnection with SWBT Document". The primary purpose for the record exchange is for reciprocal compensation.[62]

Electronic Data Interchange (EDI)

The SBC/Ameritech service areas provide CLECs with billing information that originates from their core retail billing systems representing primarily the Resale of local exchange service. Currently, the SWBT and PB/NB service areas provide this billing information following the EDI 811 transaction set, following Telecommunications Industry Forum (TCIF) guidelines (Issue 9) for billing transactions. The other two service areas, Ameritech and SNET, are currently providing Resale billing information under a Telcordia (Bellcore) standard, that is no longer supported by Telcordia.

Online Viewing/GUI

The SWBT service area offers the Bill Info GUI application that provides on-line access to billing information. This GUI application provides on-line access to the image of the CLEC's rendered bill[63].

Product Billing System Alignment

Initial decisions on the system most appropriate to bill wholesale local exchange services were based largely on each individual service area's existing system attributes. Despite being developed on different platforms, the resulting billing outputs utilize consistent formats (e.g., EDI or BDT) across the service area.

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[62] Issue 34 (CLOSED)

[63] Issue 35 (CLOSED)

Billing systems for the Unbundled Network Elements (UNEs) across the four service areas are in alignment, with the exception of Ameritech's Line-Side Ports. Ameritech bills the Line-Side Port through the Ameritech Customer Information System (ACIS), a CRIS-like billing system, where other service areas bill through CABS. The unbundled products offered by Ameritech utilizing Line-Side Port and billed through ACIS include Unbundled Local Switching, Shared Transport, and Combined Platform Offering (i.e., UNE-Platform).

Billing for all Resale products across the four service areas are in alignment.

Summary of CLEC Billing Interfaces and Product Billing System Alignment

The two tables below summarizes the currently available interfaces, versions and bill delivery methods previously described as well as the existing product billing system alignment, respectively.

Table 12:

Current Available Billing Interfaces by Service Area				
Billing	**SWBT**	**PB/NB**	**SNET**	**Ameritech**
EMI	Record Format: EMR/EMI	Record Format: EMR/EMI	Record Format: EMR/EMI	Record Format: EMR/EMI
(for Daily Usage Delivery)	Transmit to CLEC	Transmit or tape to CLEC.	Transmit to CLEC.	Transmit or tape to CLEC by State.
BDT	System: CABS	System: CABS	System: CABS	System: CABS
	Standard/Format: Billing Data Tape (BDT)	Standard/Format: Billing Data Tape (BDT)	Standard/Format: Billing Data Tape (BDT)	Standard/Format: Billing Data Tape (BDT)
	Version 32	Version 32	Version 32	Version 32
EDI/AEBS	System: Electronic Data Interchange Billing (EDIB)	System: Electronic Data Interchange Billing (EDIB)	System: Customer Records & Information System (CRIS)	System: Ameritech Billing Management System (ABMS)
	Standard: EDI 811	Standard: EDI 811	Standard: Bellcore Magnetic Billing Tape Plan	Standard: Bellcore Magnetic Billing Tape Plan
	Record Format: 4010	Record Format: 4010	Record Format: AEBS 450	Record Format: AEBS 450
	Same Info as Paper Bill	Same Info as Paper Bill	Detail Supporting Summary Paper Bill	Detail Supporting Summary Paper Bill
	Transmitted to CLEC	Transmitted to CLEC	Magnetic Tape or Cartridge	Offer Transmit & Alternative Media
Online Viewing	System: TOOLBAR/Bill Info Function: CLEC can view Resale & UNE bill including payments/adjustments, CSR, and Subscription reports.	None	None	None

Table 13:

Product Billing System Alignment by Service area				
Product	**SWBT**	**PB/NB**	**SNET**	**Ameritech**
Resale Residence Basic	CRIS	CRIS	CRIS	ACIS/RBS

Exchange				
Resale Business Basic Exchange	CRIS	CRIS	CRIS	ACIS/RBS
Resale Complex Business	CRIS	CRIS	CRIS	ACIS/RBS
Interim Number Portability	CABS	CABS	CABS	ACIS/RBS
UNE - Port	CABS	CABS	CABS	LINE: ACIS; TRUNK: CABS
UNE – Loop	CABS	CABS	CABS	CABS
UNE – Loop with Number Portability	CABS	CABS	CABS	INP: ACIS; LOOP: CABS
UNE – Loop with basic Port	UNE facility and Local Usage – CABS; Toll and DA - CRIS[64]	CABS	Not Supported	No Product
Unbundled Dedicated Transport	CABS	CABS	CABS	CABS
Blended/ Shared Transport	CABS	CABS	CABS	ACIS/RBS

F. Connectivity

Although all service areas within SBC/Ameritech currently offer CLECs connectivity to OSS, there are some differences in the form of connectivity offered, the type of facility utilized, and the ownership and maintenance of connectivity equipment.

In both its SWBT and PB/NB service areas, SBC/Ameritech currently has a Remote Access Facility (RAF) that is solely dedicated for CLEC use in accessing SBC's OSS. The SWBT facility, known as the LRAF, is located in Dallas, Texas, while the PB/NB facility, called the PRAF, is centered in Fairfield, California.

Both the LRAF and PRAF are configured with a number of routers capable of terminating private line and frame relay connections and with access servers to terminate analog modem and ISDN dial-up connections. These terminating routers and access servers are connected to a Local Area Network (LAN) which in turn provides for connectivity to the SBC/Ameritech network "firewall" systems. These secured firewalls use access lists to prevent unauthorized entry into other internal SBC/Ameritech systems that are outside the scope of those OSS offered to CLECs.

Routers for the LRAF and PRAF are provided and maintained by SWBT and PB/NB. CLECs provide their own circuit, Data Service Unit/Channel Service Units (DSU/CSUs), connectors and cables. Specifications are given to the CLEC for the DSU/CSUs (to be placed on both ends of the CLEC provided circuit) and as well as circuit line coding and framing parameters.

SNET currently allows access to its OSS via their New Haven, Connecticut network connectivity location, but does not maintain a separate facility dedicated just for CLEC use. Private line and shared frame relay connections are allowed, but dial-up access is not available. CLECs must provide and maintain their own router and CSU/DSU. Hence, CLECs are given access to SNET's premises to install and maintain their own equipment. As part of the SNET merger initiative, work was done during 1999 to establish a dedicated facility (to be called the SRAF) for CLEC use within the SNET service area. The building and testing of the private line and frame relay portion of the SRAF is

[64] Issue 36 (CLOSED)

slated to take place during the first quarter 2000, with plans to secure and install the addition of access servers to terminate analog modem and ISDN dial-up connections shortly thereafter.

CLEC connectivity to most of Ameritech's OSS is via private line or frame relay. However, some applications are accessed via the Internet, where security is provided via the use of Digital Certificates. For private line or frame relay connections, CLECs must provide their own CSU/DSU, which is then installed and maintained by Ameritech personnel. Ameritech provides connectivity to its OSS via either its Chicago, Illinois or Southfield, Michigan Electronic Commerce Network (ECN) rather than through a separate facility dedicated for CLEC use.

Currently in Ameritech there is no formal policy limiting the number of IP addresses or EDI Trading Partner IDs. At SNET, x400 addresses are used along with EDI Trading Partner IDs. While there are currently no set limits on any of these addresses or IDs, coding changes may be required with SNET's interfaces to accommodate expansion beyond the multiples currently in use. In the SWBT and PB/NB regions, the current limitation is one IP address + port combination, per CLEC ID (EDI Trading Partner ID or NDM User ID), per business function, (ie., Pre-Ordering, Ordering, etc.), per environment (Production or Test). After a CLEC has contracted their Account Manager regarding access to electronic interfaces, documentation containing connectivitity information is provided. Ameritech uses the ESO Guide, SNET has their CMIS document, and SWBT, PB, and NB use the CLEC OSS Interconnection Procedures document. Meeting with connectivity SMEs take place and the appropriate OSS Customer Support personnel assist CLECs in establishing and testing connectivity.[65]

Table 14:

CLEC-A (Production environment using Interactive Agent)

Trading Partner ID	Business Function	CLEC IP
ID#1-Pre	Pre-order	IP#1 port 6998
ID#1-Ord	Ordering	IP#1 port 6999

CLEC-A (Testing environment using Interactive Agent)

Trading Partner ID	Business Function	CLEC IP
ID#2-Pre	Pre-order	IP#2 port 6998
ID#2-Ord	Ordering	IP#2 port 6999

While most CLEC's elect to use a different set of ID and IP combinations for testing, it is not a requirement. As noted above, currently in Ameritech there is no formal policy limiting the number of IP addresses and the table above may not be fully descriptive of the Ameritech environment. It is possible in Ameritech to have multiple Trading Partner IDs and IP addresses in production.

The table below compares the present method of operation and the varying connectivity-related items within the four SBC/Ameritech service areas.

[65] Issue 38, 183, 185, 195 (CLOSED)

Table 15:

Item/Function	SWBT	PB/NB	SNET	Ameritech
Dedicated CLEC Facility	Yes	Yes	No	No
Private Line / Frame Relay connections	Yes	Yes	Yes	Yes
Dial-up Connections	Yes	Yes	No	No
SBC/Ameritech provides and maintains routers	Yes	Yes	No	Yes
CLEC provides circuit and CSU/DSUs	Yes	Yes	Yes	Yes
SBC/Ameritech installs and maintains CSU/DSUs	Yes	Yes	No	Yes
Internet access using Digital Certificates	No	No	No	Yes

G. Documentation

The following table summarizes the current documentation available to CLECs supporting the electronic OSS interfaces associated with local exchange services.

Table 16:

	SWBT	PB/NB	AIT	SNET
Product Information Document	• CLEC Handbook	• CLEC Handbook	• Resale Order Guide • Unbundled Element Ordering Guide	• CMIS Guide • CLEC Order Guide
Order Rule Information Document	• LSOR • LSPOR	• LSOR • LSPOR • Resale Users Guide (RUG) • ISR User Guide	• Product Matrices	• CMIS Guide • CLEC Order Guide
Pre-ordering, Ordering, and Provisioning User Guide (GUI)	• LEX User Guide • Verigate CLEC User Guide • Order Status User Guide • Provisioning Order Status User Guide	• LEX User Guide • Verigate CLEC User Guide • Order Status User Guide • Provisioning Order Status User Guide	NA	• W-CIWin User Guides • EF User Guides • SNAP User Guides
Pre-ordering, Ordering and Provisioning EDI Implementation Guide	• Refer to TCIF SOSC Matrices	• Refer to TCIF SOSC Matrices	• Electronic Service Order Guide	• CMIS Guide
Maintenance and Repair User Guide	• Trouble Administration User Guide	• PBSM User Guide	• EBTA User Guide	• CMIS Guide
Billing User Guide	• BDT • EMI User Guide • EDI User	• BDT • EMI – CLEC Handbook	• BDT • EMI – CLEC Guide	• BDT • EMI – User Guide

	SWBT	PB/NB	AIT	SNET
	Guide			
Interconnection Procedures	• SWBT OSS Interconnection Procedures	• PB/NB OSS Interconnection Procedures	• ESO Guide	• CMIS Guide
Testing Implementation	• SWBT Joint Implementation Template and Release Testing Template	• PB/NB Joint Implementation Template and Release Testing Template	• ESO Guide	• Informal customized test plan

III. FUTURE METHOD OF OPERATION (FMO)

A. Overview

The following section details SBC/Ameritech's plans for developing and deploying commercially ready, uniform application-to-application interfaces using standards and guidelines as defined, adopted, and periodically updated by the Alliance For Telecommunications Industry Solutions ("ATIS") for OSS, e.g. Electronic Data Interchange ("EDI") and Electronic Bonding Interface ("EBI") that support the preordering, ordering, provisioning, maintenance/repair, and billing of resold local services, unbundled network elements ("UNEs") that meet the requirements of 47 U.S.C. § 251(c)(3), and UNEs or UNE combinations that are required by the Merger Conditions ("uniform interfaces" means interfaces that present telecommunications carriers that are users of the interfaces with the same version(s) of industry standards, data formatting specifications, and transport and security specifications) and GUI interfaces. As set out below, these plans are based on modifications and enhancements to existing OSS interfaces that were identified during the course of the PMO evaluation described in Section II.

Standards

The planned modifications and enhancements outlined below are wholly consistent with standards and guidelines of the industry bodies specified in the Merger Conditions and discussed in Section II. The specific versions of the standards and guidelines that will apply to this deployment are identified in the following table:

Table 17:

Function	Applicable Standard(s)
Pre-ordering, Ordering and Provisioning	• OBF LSOG 4 or ASR 22 • SOSC ELMS 4x12x4020 • A-X12, Ver 4020 [66] • ECIC T1.265-1999 • ECIC T1.267-1999
Maintenance and Repair	• T1M1 T1.227a-1998 • T1M1 T1.228-1995 • T1M1 T1.262-1998
Billing	• OBF BDT 32 • OBF EMI Version 17 • TCIF Billing Issue 4010

The uniform interfaces contained in this POR incorporate current industry standards and guidelines. In addition, it is contemplated by the parties that SBC/Ameritech and the CLECs will discuss and agree through the course of the PORCMP to add additional functionality from LSOG 5 and other emerging guidelines (eg. line sharing, dual service, digital loop electronics, etc.) that will also be implemented as a part of this POR. CLECs will provide a list of the additional functionality 45 days prior to the delivery of Category IV Data by SBC/Ameritech as set forth in the Implementation Phase Work Schedule set forth in Section III(I). Within 10 business days after receipt of list, SBC and CLECs will work collaboratively to prepare a final list of additional functionality. SBC/Ameritech will deliver Category IV Data for this additional functionality at the same time it delivers all other

[66] AT&T Language (CLOSED)

Category IV Data. In addition, at that time, SBC/Ameritech will also deliver Category I, II, and III data for that additional functionality.[67]
If SBC/Ameritech or the CLECs believe that a variance to an industry standard or guideline is warranted, the decision whether to implement the industry standard or a variant will be made collaboratively in accordance with the PORCMP adopted with this POR. If no industry guideline exists, SBC/Ameritech will work through the PORCMP to obtain CLEC consensus on interim guidelines to implement until industry guidelines are adopted[68]. Some interregional differences may not be able to be accommodated in this POR and will, with CLEC concurrence, be addressed in the Business Rules POR.

The data elements returned from a pre-order inquiry will be in the same format with the same content, valid values, and data element characteristics as on the LSR for ordering and that such synchronization will be maintained through the order and pre-order process.

Development Timeline

The development timeline associated with the deployment dates established for all releases will be consistent with the PORCMP, in conjunction with the Implementation Phase Work Schedule set forth in Section III(I).[69]
A 12-month OSS interface development view will be shared during Change Management Process meetings. During the period of this plan, it is anticipated that forces other than this plan may cause additional changes and enhancements to the ordering application to application and GUI interfaces offered to CLECs by SBC/Ameritech. Consistent with the PORCMP, as these changes and enhancements are known, release announcements will be issued by SBC/Ameritech and the OSS 12-month view will be revised.

Versioning

SBC will support three versions of software at all times for its EDI Ordering and EDI/CORBA Pre-Ordering interfaces. The last dot release of the retired LSOG will be supported until the next LSOG is implemented. The other two versions supported will either be the latest two dot versions or in the case of initial implementation of an LSOG, the new LSOG and the next to last dot release of the retired LSOG. Sunset of the oldest LSOG will occur on the implementation date of the newest LSOG version. This versioning concept is further described in Attachment A (Interface POR Change Management Process - Versioning of Gateway Releases) of this POR. The uniform

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[67] Issue 39, 40,41,42, 42a (CLOSED)

[68] AT&T Language (CLOSED) plus Issue 39, 40, 41, 42, 42a, 134a, 155, 164 (ALL CLOSED)

[69] AT&T Language (CLOSED)

versioning process will be implemented with the uniform interfaces in accordance with the timeline in the Implementation Phase Work Schedule, in Section III(I) of this document.[70]

CLEC Joint Testing

The parties are in disagreement regarding the composition of the test environment/facility that SBC/Ameritech would make available for new and existing interface testing.[71]

For changes to existing interfaces, CLEC joint testing will be conducted for gateway interfaces and LEX. Where applicable, SBC/Ameritech and CLECs will perform gateway testing as negotiated by the parties and documented in a customized test plan. SBC/Ameritech maintains a Joint Release Test Plan template on its CLEC website that may be used in the development of the customized test plan. Each testing party will meet with SBC and agree on its own set of test scenarios that will be included in the test, applicable entrance and exit criteria, and its test schedule. Regression testing will be supported in limited scenarios as agreed upon in the documented test plan. A limited number of test accounts will be made available during CLEC testing. SBC/Ameritech will make testing available in accordance with the timeframes specified in the PORCMP. The available testing timeframe shall be no less than sixty calendar days. For LEX LSR changes, SBC/Ameritech will provide CLECs access to the test environment in accordance with the timeframes specified in the PORCMP. Testing must be scheduled to end at least seven (7) calendar days prior to the scheduled implementation date, unless otherwise agreed between SBC/Ameritech and the CLEC.[72]

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[70] Issue 11, 20 (CLOSED) Issue 44 (RPA)

[71] Issues 14 (DO), 21 (DO), 219 (DO)

[72] Issues10 (CLOSED), 42b (CLOSED)

B. Pre-ordering

A single, uniform, application to application pre-ordering interface accessible using either EDI or CORBA protocols will be implemented (SBC/Ameritech will offer both protocols throughout the 13 state region). This interface version will be available for all SBC/Ameritech service areas, and will represent a new version of the application to application interfaces currently existing in all service areas.[73] The uniform pre-ordering application to application interface which will utilize EDI and CORBA will be referred to as the "application to application interface" in the remainder of this pre-ordering section of this plan. Pre-order response time performance will be measured by SBC/Ameritech with respect to the different technology frameworks i.e. GUI and EDI/CORBA. The pre-ordering measuring systems will be developed and implemented in proceedings at the state level that address performance measurement and reporting requirements.[74]

All SBC/Ameritech service areas will implement a uniform GUI to access pre-ordering functions. The GUI, which will be an enhanced version of the Verigate application currently offered by SBC/Ameritech in the SWBT and PB/NB service areas, will have a presentation that makes use of the terminology employed in OBF LSOG version 4, and have functionality similar to that offered via the uniform application to application interface. While having the same pre-ordering transaction functionality as the application to application interface, the GUI will include other functionality appropriate to that type of interface, such as the functions for storing or printing results.[75] Attached to this document is the User Guide for the existing Verigate application (see Attachment B). This application will be enhanced to include a browser-based user interface, access to pre-ordering functions for all SBC/Ameritech service areas, and the pre-ordering functions and specific provisioning functions as documented in the Uniform Pre-Ordering Message Flows and Section D-Provisioning of this document . CLECs may access the uniform pre-ordering GUI via private line, frame relay, dial-up or the Internet as described in Section III.G. (Connectivity).[76] The uniform pre-ordering GUI will be referred to as the "GUI" in the remainder of this pre-ordering section of this plan.

There are multiple phases scheduled for the implementation of the uniform pre-ordering interface during the twenty-four months following the SBC/Ameritech merger close as described in the Implementation Phase Work Schedule set forth in Section III(I).

Coincident with the implementation of the uniform version of the application to application interface in each service area, the uniform version of the pre-ordering GUI will also be made available. For Loop Make-up information, SBC is committed to maintain the pre-ordering GUI in sync with Pre-Order EDI and DataGate[77].

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[73] Issue 48 (CLOSED)

[74] Issue 74 (CLOSED)

[75] Issue 79 (CLOSED)

[76] Issue 52 (CLOSED)

[77] Issues 222 (TA) and 223 (DO)

The following list of descriptions and table #19 summarize the pre-ordering functions to be available in all SBC/Ameritech service areas via the uniform application to application and GUI interfaces:

Uniform Pre-ordering Message Flows

The uniform EDI application to application interface will utilize ASC X12, Ver 4020 transaction sets to pass information between requestor and provider using the 850 and 855 transaction sets. A typical pre-ordering transaction will begin when a CLEC submits an 850 purchase order. Responses, whether positive or negative, will be returned to the CLEC via an 855 purchase order acknowledgement. Due to the interactive nature of the pre-ordering functions and a desire for consistency across the SBC/Ameritech 13 state service area, the 997 functional acknowledgement transaction set will not be used. Also, the 855 purchase order acknowledgement will be used, instead of the 864 text message, to return customer service information.

The uniform CORBA application to application interface will employ T1M1 IDL data models in a request-response message flow to exchange data between a message requestor and provider.

Uniform Pre-ordering Functions

The following pre-ordering functionality is planned for the uniform application to application and GUI interfaces. These functions will be available via the application to application interface in both EDI and CORBA. In order to understand and describe the data field-level specifications for the uniform pre-ordering interfaces, SBC/Ameritech has analyzed a single function (Feature/Service Availability) and developed a proposed uniform specification for that transaction (see Attachment C). Consistent with the Scenerios included in Attachment G, and the process laid out in the Implementation Phase Work Schedule in Section III(I), SBC/Ameritech will perform an analysis of all other pre-ordering transactions, including but not limited to, address validation, telephone number availability and customer service information and will develop a proposed uniform specification for these transactions.[78] The actual final data field-level specifications will be developed with CLEC input per the timeline contained in the Implementation Phase Work Schedule in Section III(I), in accordance with the PORCMP.

Address Validation Inquiry

The Address Validation Inquiry will continue to be available in all SBC/Ameritech service areas. As part of the uniform application to application and GUI interfaces, it will provide access to validated address information by address or working telephone number. This working telephone number inquiry will be available for residential service only, as it is for internal SBC/Ameritech users of the underlying OSS. However, all residence and business addresses may be validated through input of the address itself[79]. Address information will also continue to be available as a Data Validation File in the SWBT, PB/NB and Ameritech service areas, and will be made available as a Data Validation File in the SNET service area with the implementation of the uniform application to application and GUI interfaces in that service area.

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[78] AT&T Language (AGREED)

[79] Issues 60 and 81 (CLOSED)

Common Language Location Indicator (CLLI) Inquiry
The Common Language Location Indicator (CLLI) Inquiry will provide the CLLI code associated with a telephone number, and is used to determine the appropriate CLLI to be submitted on a local service request for port or loop with port service. This inquiry will be available in all service areas in the uniform application to application and GUI interfaces. This will be the first implementation of this inquiry in the Ameritech and SNET service areas.

Connecting Facility Assignment (CFA) Inquiry
Based on the input facility number, this inquiry may be used to verify the status of a connecting facility prior to submitting this information on a local service request. This inquiry will be available in all SBC/Ameritech service areas via both the uniform application to application and GUI interfaces. This inquiry will be introduced in the Ameritech service area as part of the functionality addition to the existing Ameritech EDI interface in April 2000. It will be introduced in the SNET service area with the implementation of the uniform application to application and GUI interfaces in that service area.

Customer Service Information Inquiry
The Customer Service Information Inquiry will continue to be available in all SBC/Ameritech service areas via both the uniform application to application and GUI interfaces. It will provide the CLEC the ability to retrieve Customer Service Information (CSI) records for accounts belonging to the requesting CLEC or to SBC/Ameritech retail units, but not when accounts are owned by another CLEC. CSI records may be retrieved using account telephone numbers or individual working telephone numbers. The interface will return up to 5000 working TNs for application to application and up to 1000 working TNs for GUI CSI responses. The CSI response, for all SBC CSI data elements which are OBF defined, will be fielded and consistent across service areas (refer to Section III.A. (Standards) for handling of variances).[80]

Data Validation Files
Data Validation Files will continue to be available in all SBC/Ameritech service areas. The directory names, class of service codes, USOC, community names, yellow page headings, feature/service availability, and PIC/LPIC code files will be available via Connect:Direct, CD-ROM or downloadable using the pre-ordering GUI. Due to its size, the street address guide will be available only via Connect:Direct and CD-ROM. The Data Validation Files will be modified to be uniform in format . Variances in population of the data in such files will depend on the availability of that data in source backend systems.[81]

Digital Subscriber Loop Pre-qualification Inquiry
The Digital Subscriber Loop Pre-qualification Inquiry will continue to be available in the SWBT and PB/NB service areas via the uniform application to application and GUI interfaces. This inquiry will be made available in the Ameritech and SNET service areas with the introduction of the uniform application to application and GUI interfaces in those service areas.

Digital Subscriber Loop Qualification Inquiry

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[80] Issues 49, 50, 51, 59, 63, 83d (CLOSED)

[81] AT&T Language (AGREED)

This inquiry will provide CLECs with access to a mechanized loop qualification capability that can be used to qualify unbundled loops on a pre-order basis. This mechanized loop qualification will provide the CLECs with the information needed to make an informed business decision regarding its ability to provide DSL-based service to the end user. This inquiry will be available in all SBC/Ameritech service areas via the uniform application to application and GUI interfaces. It will be introduced in the SWBT and PB/NB service areas via the DataGate and Verigate interfaces in March 2000, and via the EDI/CORBA application to application interface in April 2000. In the Ameritech service area, this inquiry will be introduced via the EDI application to application interface in April 2000, and via TCNet in June 2000. The Loop Qualification Inquiry will be introduced in the SNET service area via the EDI application to application interface in July 2000.

The pre-ordering interfaces offered by SBC/Ameritech will be enhanced during 2000 specifically with respect to the Digital Subscriber Loop Qualification Inquiry. These enhancements come in response to the FCC's UNE Remand Order (Third Report and Order in Docket 96-98), CLEC requests, and in response to specific requirements in the FCC's SBC/Ameritech Merger Conditions on providing loop makeup information for unbundled DSL-capable loops. SBC/Ameritech continues to discuss and provide information on these enhancements through the Change Management Process. The data returned from the mechanized loop qualification transaction will be based on actual data, where available, rather than design data. To the extent it is designed data, as the actual data is gathered to fulfill manual loop qualification requests, SBC/Ameritech will update its databases with the actual data. The timeframe within which SBC/Ameritech shall complete such updates is in dispute [82]. SBC will implement the outcome of the Advanced Services collaborative with regard to DSL Loop Qualification, and this function will then be available on the uniform interface as described as a Uniform GUI, EDI, DataGate and CORBA function in the Advanced Services collaborative. Details of the fields to be returned are itemized in the Advanced Services POR. Further, SBC will launch an effort to populate loop make-up data in mechanized systems where it does not exist so that the percent of actual data becomes consistent with the level of actual data in the Ameritech region. This project will begin in July 2000 but, because of the massive amount of data to be converted, could take 4-6 years to complete. SBC will solicit feedback from CLECs on the priority of offices for which data will be populated and make every attempt to mechanize the data for those offices based on the CLEC priorities identified. SBC will report on a quarterly basis, via Accessible Letter, offices completed in the previous quarter and offices scheduled for the next quarter.[83].

Directory Listing Inquiry

The Directory Listing Inquiry will be available in all SBC/Ameritech service areas via the uniform application to application and GUI interfaces. This will be the introduction of this inquiry in the SWBT, PB/NB, and Ameritech service areas. The Directory Listing Inquiry will provide for the retrieval of listing information by either account telephone number or individual working telephone number. CLECs will be able to retrieve directory listing information for accounts belonging to the requesting CLEC or to SBC/Ameritech retail units, but not for accounts owned by another CLEC. A uniform transaction size limit will be implemented and the format of the information will be consistent between service areas. The data content of the response transaction will differ between operating service areas based on the availability of information in the source backend systems. This

[82] Issue 243 (DO)

[83] Issue 223a (DO)